SECTION II—CLAIMS

- 1.-28. (Canceled)
- 29. (New) A micro resonator comprising:

an oscillator member disposed upon an oscillator pedestal; and

a structure positioned on the oscillator member, the structure being separated from the oscillator member by a protective pad.

- 30. (New) The micro resonator according to claim 29 wherein the protective pad is made from aluminum, an aluminum alloy, silver, a silver alloy, indium, or an indium alloy.
- 31. (New) The micro resonator of claim 29 wherein the structure comprises a pattern of spaced-apart stacks disposed upon the oscillator member.
- 32. (New) The micro resonator according to claim 29 wherein the protective pad is made from a refractory metal, a refractory metal oxide, a refractory metal silicide, a refractory metal nitride, or combinations thereof.
- 33. (New) The micro resonator according to claim 29 wherein the oscillator member is made of a material selected from polysilicon, a metal, a metal nitride, a metal oxide, a metal silicide, or combinations thereof.
- 34. (New) A microresonator system comprising:

a microresonator having an input and an output and comprising:

- an oscillator member suspended above a substrate by an oscillator pedestal,
- a drive electrode positioned between the oscillator member and the substrate.
- a structure positioned on the oscillator member, the structure being separated from the oscillator member by a protective pad;

an input circuit connected to the input; and

an output circuit connected to the output.

- 35. (New) The micro resonator according to claim 34 wherein the protective pad is made from aluminum, an aluminum alloy, silver, a silver alloy, indium, or an indium alloy.
- 36. (New) The micro resonator of claim 34 wherein the structure comprises a pattern of spaced-apart stacks disposed upon the oscillator member.
- 37. (New) The micro resonator according to claim 34 wherein the protective pad is made from a refractory metal, a refractory metal oxide, a refractory metal silicide, a refractory metal nitride, or combinations thereof.
- 38. (New) The micro resonator according to claim 34 wherein the oscillator member is made of a material selected from polysilicon, a metal, a metal nitride, a metal oxide, a metal silicide, or combinations thereof.